

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
8 January 2004 (08.01.2004)

PCT

(10) International Publication Number
WO 2004/002897 A1

(51) International Patent Classification⁷: C02F 1/44

(21) International Application Number:
PCT/SG2002/000145

(22) International Filing Date: 29 June 2002 (29.06.2002)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant and

(72) Inventor: WONG, Shih, Yi [SG/SG]; 114 Lorong H.,
Telok Kurau, Singapore 426141 (SG).

CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG,
SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,
VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR,
GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent
(BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
NE, SN, TD, TG).

Published:

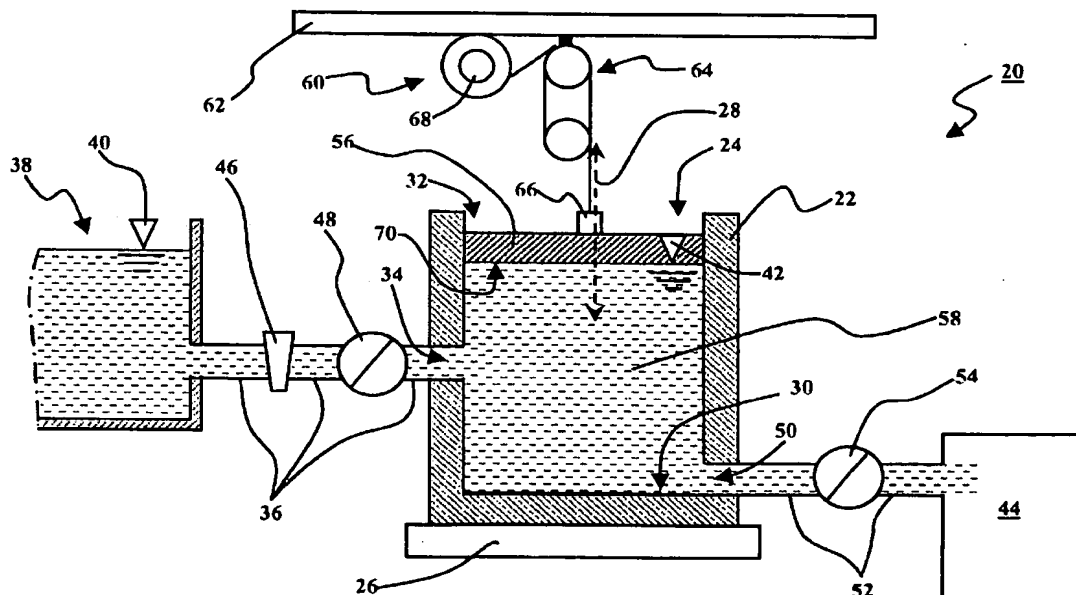
— with international search report

(74) Agent: AXIS INTELLECTUAL CAPITAL PTE LTD;
21A Duxton Road, Singapore 089487 (SG).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

(54) Title: A PRESSURISATION SYSTEM



(57) Abstract: A pressurization device is described mobilizing gravity to mobilize seawater and to employ a weight (56) for gravi-
tationally applying a force to and thereby pressurizing an enclosed pocket (58) of seawater, resulting in low energy utilisation. Energy
is further recovered from the flow of pressurized seawater that is supplied to the desalination system (20), resulting in a mechanically
robust and energy efficient pressurization system.

WO 2004/002897 A1